CLAIM AMENDMENTS

WHAT IS CLAIMED IS:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

1. **(Currently Amended)** **A** ~~M~~method for synchronizing, between the cylinders of an internal combustion engine, the differences in the quantity of fuel injected, ~~**in which**~~ **comprising the steps of:**

determining the differences in the quantity of fuel injected which exist at a~~**n**~~ **low** operating point in the lower engine-speed range with the injection parameter values valid at that point under normal operating conditions ~~**are determined**~~ by means of a method of measuring individual cylinders to record irregularities in the running of the internal combustion engine**,** ~~**and are**~~

assign**ing the differences**~~**ed**~~ to the low operating point**,** ~~**and in which,**~~

for operating ranges with higher loads and engine speeds, ~~**an adaptation of**~~ **adapting** the differences in the quantity of fuel injected ~~**is carried out**~~ for a chosen injection parameter, ~~**characterized in that**~~

at the low operating point**, setting** the chosen injection parameter ~~**is set**~~ for adaptation ~~**(4, 5, 6, 7)**~~ to a value which deviates from the value applicable at that point under normal operating conditions, ~~**and in that**~~

for the set value**, determining** the differences in the quantity of fuel injected ~~**are determined**~~ by means of

measurement of the irregularities in the running of the engine, and

~~are learned~~ **storing the differences** as adaptation values which are assigned to the respective injection parameter value, wherein during the adaptation ~~(4, 5, 6, 7)~~ the movement of the operating point, which changes with the injection parameter value set, respectively, is limited.

2. **(Currently Amended)** **A** ~~M~~method according to Claim 1, ~~characterized in that~~**wherein**, in order to limit the movement of the low operating point during adaptation ~~(4, 5, 6, 7)~~, at least one second injection parameter is set such that the operating point remains at least approximately stationary.

3. **(Currently Amended)** **A** ~~M~~method according to **Claim 1, wherein** ~~Claim 2, characterized in that~~, in the process of adaptation ~~(4, 5, 6, 7)~~ to successively higher values of the injection pressure chosen as an injection parameter, a correspondingly shorter injection period is set in order to limit the movement of the low operating point.

4. **(Currently Amended)** **A** ~~M~~method according to Claim 2, **wherein**~~characterized in that~~, in the process of adaptation ~~(4, 5, 6, 7)~~ to successively lower values of the injection pressure chosen as an injection parameter, a correspondingly longer injection period is set in order to limit the movement of the low operating point.

5. **(Currently Amended)** **A** ~~M~~method according to **Claim 2, wherein** ~~any one of Claims 2 or 3, characterized in that~~ the injection pressure is changed gradually by a defined amount.

6. **(Currently Amended)** **A** ~~M~~method according to **Claim 1, wherein** ~~any one of the preceding claims, characterized in that~~ for the adaptation ~~(4, 5, 6, 7)~~ a low operating point is selected at which the maximum sensitivity and/or reliability of measurement of the irregularity in the running of the engine is achieved.

7. **(Currently Amended)** **A** ~~M~~method according to **Claim 1, wherein** ~~any one of the preceding claims, characterized in that~~ the low operating point is chosen in the idling range.

8. **(Currently Amended)** **A** ~~M~~method according to **Claim 1, wherein** ~~any one of the preceding claims, characterized in that~~ the learned adaptation values serve to calculate cylinder-specific correction factors, which are applied to an activation parameter of an injection device of the internal combustion engine such that a synchronization of the quantities of fuel injected occurs.

9. **(Currently Amended)** **A** ~~M~~method according to Claim 8, **wherein** ~~characterized in that~~ the injection device for each cylinder is formed by an injector with a piezoelectric actuator, wherein the activation energy of the actuators is used as an activation parameter.

10. **(Currently Amended)** **A** ~~M~~method according to Claim 9, **wherein**~~characterized in that~~, for a defined loading/unloading time of the injector, the actuator energy is adapted correspondingly.

11. **(Currently Amended)** **A** ~~M~~method according to Claim 10, **wherein** ~~characterized in that~~ the loading/unloading time of the main injection is set to an initial value ~~(τ_0)~~ and is gradually changed to an extreme value, wherein with each step the actuator energy is adapted correspondingly.

12. **(Currently Amended)** **A** ~~M~~method according to **Claim 1, wherein** ~~any one of the preceding claims, characterized in that~~, in order to record the irregularity in the running of the internal combustion engine, the angular acceleration of the crankshaft of the internal combustion engine caused by the differing quantities of fuel injected in individual cylinders is analyzed.

13. (Currently Amended) **A** ~~M~~method according to Claim 12, **wherein** ~~characterized in that~~, at the stationary operating point set for adaptation ~~(4, 5, 6, 7)~~ with synchronized quantities of fuel injected, the absolute value of the associated quantity of fuel injected is determined from a stored model of the torque of the internal combustion engine.

14. **(NEW)** A system for synchronizing, between the cylinders of an internal combustion engine, the differences in the quantity of fuel injected, comprising:

measurement means for recording irregularities in the running of the internal combustion engine and for determining the differences in the quantity of fuel injected which exist at a low operating point in the lower engine-speed range with the injection parameter values valid at that point under normal operating conditions,

means for assigning the differences to the low operating point,

means for adapting the differences in the quantity of fuel injected for a chosen injection parameter,

means for setting the chosen injection parameter for adaptation to a value which deviates from the value applicable at that point under normal operating conditions, and

memory means for storing the differences in the quantity of fuel as adaptation values which are assigned to the respective injection parameter value, wherein during the adaptation the movement of the operating point, which changes with the injection parameter value set, respectively, is limited.

15. **(NEW)** A system according to Claim 14, wherein the injection device for each cylinder is formed by an injector with a piezoelectric actuator, wherein the activation energy of the actuators is used as an activation parameter.

16. **(NEW)** A system according to Claim 15, wherein, for a defined loading/unloading time of the injector, the actuator energy is adapted correspondingly.

17. **(NEW)** A system according to Claim 16, wherein the loading/unloading time of the main injection is set to an initial value and is gradually changed to an extreme value, wherein with each step the actuator energy is adapted correspondingly.

18. **(NEW)** A system according to Claim 14, wherein, in order to record the irregularity in the running of the

internal combustion engine, the angular acceleration of the crankshaft of the internal combustion engine caused by the differing quantities of fuel injected in individual cylinders is analyzed.

19. **(NEW)** A system according to Claim 18, wherein, at the stationary operating point set for adaptation with synchronized quantities of fuel injected, the absolute value of the associated quantity of fuel injected is determined from a stored model of the torque of the internal combustion engine.